Ahnaf Ahmed

ID-2621445

DIGITALIZATION AND ENTREPRENEURSHIP INTENTION

Master's Thesis

Department of International Business Management

September, 2021.

ABSTRACT

This study aims to identify the link between digitalization and entrepreneurial intentions based on Information and Communication Technology. It is essential to assess the impact of relational support and educational support on entrepreneurial intentions. Sometimes, the relational structure positively affects the improvements of the start-up business. Moreover, the demographic factors such as gender, age, relationship status and residence give significant support to start a business. In addition to that, structural support, such as financial and business opportunities tend to lead somebody's ideas to be an entrepreneur. Identifying the factors that affect the entrepreneurial intentions needs to be determined to give necessary support, motivations and financial aids, even in university education. It helps entrepreneurs eliminate drawbacks and enhance their performance since it is the trending and economical way of being an entrepreneur. However, the digitalization on entrepreneurial intentions is not evaluated at the university level and furthermore; it has not been applied structural equation modelling to identify the factors that affect entrepreneurial intentions and digitalization in university education. The data which was gathered via survey was dissected contrasting with one another variables and the likenesses product taken up and stuck up for data mining. Finally, identified major points were assessed and quantitatively investigated for finding an answer for the distinguished effects. Our study has found that the three independent variables (Educational structure, Relational Structure, Structural Structure) are significantly associated with entrepreneurial intention. However, six different hidden factors were identified accordingly these three variables, which were not achieved in previous studies. Hence, it may fill the gap between previous studies in future. Finally, this study concluded an excellent platform statistically to realize the mediating effect of behavioural control and personal attitudes on entrepreneurial intentions.

ACKNOWLEDGEMENT

First gratitude and appreciation to God, the Almighty, for showering his blessings on me during my research work, allowing me to successfully accomplish the research.

I want to convey my heartfelt gratitude to my research supervisor Professor Vesa Puhakka Head of the Department of Marketing, Management, and International Business of University of Oulu, for allowing me to do research and providing me with essential support throughout the process. He showed me how to conduct research and present my findings in the most clear and concise manner possible. Working and studying under his direction was a great honor and privilege.

I owe my parents a debt of gratitude for their love, prayers, care, and sacrifices in educating and preparing me for the future. I am very much thankful to my friends for their help during this research and the students of University of Oulu who participated to complete my surveys. Finally, I want to express my sincere gratitude to everyone who has helped me complete the research work, perhaps directly or indirectly.

ABBRIVATIONS

H0 – Null Hypothesis

H1 – Alternative Hypothesis

Table of Contents

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

1.1 Introduction

Digitization can be expressed as converting information or data into a digital format that can be retrieved, analyzed, shared, updated, or stored conveniently. Digital technologies such as the internet, smartphones, Google Drive, Dropbox, GitHub or any other cloud system are the platforms which support to handle digitalization. The concept of digitalization is playing a leading role in the world's economy and hence there are numerous opportunities are opened by changing the process of entrepreneurship (Brynjolfsson and McAfee, 2014). Entrepreneurship is an innovative and creative work that adds value to goods or services and enhances job opportunities; improve productivity and social welfare, and more profoundly develops the economy (Guerrero, Rialp, & Urbano, 2008). Digitalization provides new opportunities for a start-up business to improve the delivery of goods or services worldwide (Elia et al., 2016).

Previous studies found that entrepreneurial desires arise in the background of peoples' attitude, education level, geometric factors, family background, school or higher education and some other factors (Ozarralli and Rivenburgh, 2016; Fayolle et al., 2006). With the advancement of financial technology and digitalization of traditional payment processes, a couple of digital payment methods have been introduced within the last three decades. Gradually digital cards, mobile payment, and e-banking are taking the place of cash. Though new generations are much more used to the digital payment system, older generations are comparatively much less accustomed to the same (Francisco, Francisco and Juan, 2015). According to reports, generation Z uses digital payments more frequently than generation X and Y (King, 2018). As dynamics are changing rapidly with digitalization, older generations are also coming under the hood of new payment systems because of some incentives and market drivers. The drivers are limited to globalize shopping, cross country payments, growing e-commerce industry, government pressure, and perks for prices through cards. Therefore, these results require to be combined with the digitalization of the economy and its possible impacts. Therefore, this study aims to identify the

link between digitalization and entrepreneurial intentions based on Information and Communication Technology.

1.2 Problems Statement

It is essential to assess the impact of relational support and educational support on entrepreneurial intentions. Sometimes, the relational structure positively affects the improvements of the start-up business. Simultaneously, somebody may refuse to start a business by seeing a family member is getting extremely busy on it. Hence, it would negatively affect the entrepreneurial intention of a person. For example, when a family member has their own business or company and the next generation of the corresponding family starts a business due to the gained experience. On the other hand, sometimes the second generation may reject the idea of creating a new business since seeing the workload and responsibility for a single person.

Furthermore, some institutions develop their educational background to start a business or develop a family business further. Moreover, the demographic factors such as gender, age, relationship status and residence give significant support to start a business. In addition to that, structural support, such as financial and business opportunities tend to lead somebody's ideas to be an entrepreneur.

Despite this, personal attitudes and behavioural control on entrepreneurial intentions affecting skills, open-minded ideas, knowledge and motivation want to measure to have a successful start-up business. Limitations of individual motivations and poor attitudes are also defined within some contest since it was identified as a barrier for a person's entrepreneurial intentions.

Hence, identifying the factors that affect the entrepreneurial intentions needs to be determined to give necessary support and motivations. Unless that, motivated people may start a new business and later on with the less support and knowledge they may be faced failures. Therefore, identifying essential and supportive factors to improve entrepreneurial intentions needed to be identified and support for the students wants to be given in different perspectives such as knowledge, motivation and financial aids, even in university education.

In addition to that, more and more entrepreneurs are come forward in society by developing technology. For example, online banking facilities and online marketing facilities make them comfortable to achieve their customers' requirements quickly and accurately. New technology, new devices and latest techniques make people's day-to-day lifestyles easier and hence, this digitalization directed humans to do innovations and creations.

Therefore, all the above-mentioned factors such as educational support, relational support, structural support, behavioural control and personal attitudes need to be evaluated in digitalization. It helps entrepreneurs eliminate drawbacks and enhance their performance since it is the trending and economical way of being an entrepreneur. Moreover, identify the effects of social media on employee.

1.3 Research Questions

The following research questions will conduct acceptance of this study.

- ✓ What is the relationship between attitude and Entrepreneurial intentions in university students?
- ✓ What is the relationship between behavioural control and Entrepreneurial intentions in university students?
- ✓ What is the relationship between support factors and Entrepreneurial intentions in university students?

1.4 Aims and Objectives

The study will be conducted following objectives, according to the finding in the research problem.

Main Objective

Identify the impact of digitalization on entrepreneurial intentions with three support variables, attitude and behavioural control in university students and suggest essential insights on the importance of digitalization on entrepreneurial intention.

Sub Objectives

- ✓ Identify the impact of demographic factors on Entrepreneurial intentions.
- ✓ Identify the impact between Attitudes and entrepreneurial intention.
- ✓ Identify the impact between Behavioral Control and entrepreneurial intention.
- ✓ Identify the impact between Education Support and Attitudes
- ✓ Identify the impact between Structural Support and Attitudes.
- ✓ Identify the impact between Relational Support and Attitudes.
- ✓ Identify the impact between Education Support and Behavioral Control
- ✓ Identify the impact between Structural Support and Behavioral Control
- ✓ Identify the impact between Relational Support and Behavioral Control

1.5 Problem Justification

Several studies have discussed entrepreneurial intentions and the impact of education level, family background and geometric factors are explored in several industries to access the structural relation from different aspects. Furthermore, the barriers to create entrepreneurial ideas in several fields also discussed. However, the digitalization on entrepreneurial intentions is not evaluated at the university level and furthermore; it has not been applied structural equation modelling to identify the factors that affect entrepreneurial intentions and digitalization in university education. Therefore, employee educational support, relational support, structural support, personal attitudes and behaviour control are considered variables for this study.

1.6 Software Tools to be used

The analysis of data in this research study will be done by IBM® SPSS® Statistics 22 software. Structural Equation Modelling was carried out by R programming and AMOS in IBM® SPSS® Statistics 22.

1.7 Organization of the study

This study comprises five (05) sections and the accompanying points will be covered likewise.

Chapter One – Introduction portrays the foundation of the investigation, the examination's objective, the importance of the examination, and the devices that will be used for this study.

Chapter Two - Literature survey which principally focal points of the researcher definitions and ideas identifying with structural, educational, relational support, behavioural control, attitude towards entrepreneurial intentions and their connections.

Chapter Three – Methodology essentially expresses the research philosophy, research plan, conceptual framework, operationalization, and proportions of every variable, details on population, sample, and sampling techniques.

Chapter Four - Data exploration with the discussion that expresses the method of data exploration is done and the tools and software operated in the study. Further, the statistical tests would be implemented for hypotheses testing will be referenced, such as Descriptive data Analysis methods, Factor Analysis, and Structural Equation Modelling (SEM).

Chapter Five - Conclusion with recommendations will provide a closed synopsis of the research findings alongside research goals. Finally, a few recommendations will be introduced depending on the consequences of data analysis and hypotheses testing.

CRITICAL REVIEW ON LITERATURE

2.1 Introduction

The literature review comprises of the hypothetical and exact clarifications of various analysts on variables namely; educational support, relational support, structural support, personal attitudes and behavioural control used in the study.

Likewise, the literature review talks about the meanings of the distinctive idea given by many researchers and authors; clarifies the theories/models identified with principle variables; depicts the components of those variables to quantify them; observe the empirical studies which are conducted to represent the interrelationship between those variables.

2.1. Definitions

2.1.1. Educational Support

Previous research found that educational support is a critical factor for entrepreneurial intentions (Turker & Selcuk 2009). Related courses, workshops on being an entrepreneur, forming skills and attitudes to be an entrepreneur etc. are some clear examples for it. Turker & Selcuk, 2009 found that a person who wishes being an entrepreneur will effectively and efficiently be guided through a proper university education so he/she could acquire and observe the required knowledge in the field of entrepreneurship. Similar to that, a study which has been conducted in Malaysia identified that the proper exposure to right entrepreneurship education will encourage and motivate the learners to become entrepreneurs (Mumtaz et al., 2012). Thus, the university education plays a key role in upholding entrepreneurship as a career choice for students by offering required exposure upon theoretical and practical knowledge on entrepreneurship. As skills, abilities and knowledge in the field of entrepreneurship are must possessed characteristics, learners would obtain the best opportunity to increase their level of necessary skills and abilities so as to gain an interest in the said field. Followed by that, according to Wilson, Kickul & Marlino (2007), focused education boosts students' entrepreneurial intention by giving them with knowledge, attitudes, and necessary skills to cope up with the

complexities implanted in entrepreneurial tasks such as seeking opportunity, assembling of resources, baring risks and driving the business to the success. Furthermore, as stressed by Lussiers and Pfeifer's (2001) entrepreneur with greater level of education, industrial and managerial experience and exposure have higher potential of bring their businesses to a success. This finding even agrees with Fiet, (2000) that, entrepreneurial education offers learners the experience of being an expert in the field through observing different role models and their behaviours, which let them experience practical learning activities, knowledge in developing business plans and conducting replicated or real small business initiatives.

Furthermore, Henderson and Robertson, (2000) argues, although the university education allows the students to obtain the knowledge on theoretical aspects of the entrepreneurial activities, educationists can provide the background for entrepreneurial intentions. For example, digitalized teaching materials and digitalized classrooms can be used in university education system.

The partaking in entrepreneurial training programmes is associated with making changes in those who participate in such events in terms of attitudes and entrepreneurial intentions. Thus, these trainings should be backed by proper teaching strategies which are compatible with the technologically advanced student-centred approach to form favourable attitudes (Kuratko 2005). As Wood and Bandura, (1990) suggests, teaching and learning of higher education should be focused on offering superior involvement or recurrent performance attainment.

As per the study illustrated by Mumtaz et al., (2012), exposing to right entrepreneurial education will empower learners to form optimistic and favourable attitude in choosing entrepreneurship as it encourage developing creative ideas to become a good entrepreneur, along with facilitating needed knowledge and entrepreneurial skills through educational support such as for instance, teaching methods, course outline or the syllabus and co-curricular activities.

2.1.2. Relational Support

Relational support implies the support gained from family and friends to be an entrepreneur. Close relationships can encourage involving in entrepreneurial activities. As per related literature, the probability of becoming an entrepreneur is

higher when one's family member is an entrepreneur (Lindquist et al., 2015). Similarly, Zapkau et al. (2015) stated in a study that the parental role models are always positively impact on one's entrepreneurial intention. According to Aldrich & Cliff, (2003), a family has been considered and evaluated as a contextual setting for entrepreneurial intentions of individuals. Altinay et al. (2012) in their study carried out based on the university students in the UK found that, family entrepreneurial background is positively related to one's entrepreneurial intention. Accordingly, as explained by Powell and Eddleston (2013), this family centric viewpoint proposes that family is a substantial institution that people do rely on to take initiative decisions and reach entrepreneurial success.

Furthermore, social relationships built through social media can influence for entrepreneurial intentions. It is identified that many researchers such as, Kirkwood (2007) and Karimi et al. (2013) has stressed out the significance of the entrepreneurial role models on the preference towards entrepreneurship in related literature. The reason behind this is the fact that the role models frequently deliver the needed information, direction, better guidance, and support by being a real-world example. With such offer, the students are more inclined to and confident in becoming an entrepreneur.

2.1.3. Structural Support

Structural support refers to the entrepreneurial assistance given from the environment in which the entrepreneurial activities and ideas are raised. For instance, motivation, culture and organizational support can be specified as some factors that support an individual to become an entrepreneur. Furthermore, it may include potential business opportunities, financial aids, and different rules and regulations imposed to the entrepreneurs, (Turker & Selçuk, 2009). As a developing country, the Sri Lankan government is very helpful towards developing entrepreneurship within the country in numerous ways such as providing technical and advisory assistance, marketing, funding facilities, quality management services, tax enticements and etc. furthermore, there are various ministries and organizations formed to assist Small and Medium Enterprises (SMEs), such as Small Business Development Centre, Industrial Development Board (IDB), Centre for Entrepreneurship Development and Consultancy Services (CEDACS). As per the Turker & Selcuk (2009)'s study

findings, the private, public and non-governmental agencies inspire people to engage in entrepreneurial undertakings. In addition to that, Denanyoh et al., (2015) found positive relationship between initiative activities, motivations and other provisions from government and non-government agencies and entrepreneurial intentions.

2.1.4. Behavioral Control

Behavioural control refers to the personal or subjective assessment of an individual's ease or difficulty to perform a particular behaviour (Ajzen, 1991).

It is related to the feasibility of the behaviour that an individual usually adopt with the perception of the ability to control and master (Fayolle,2006). It is similar to self-efficacy theory explained by Bandura (1982) which defines as "an individual's belief that he or she is capable of performing a task" (Bandura, 1982). Maes et al., (2014) explain that, behavioural control is a belief of an individual's perceived personal affluence or trouble to perform entrepreneurial behaviour and it needs to be distinguished between internal and external control beliefs which have the ability of impacting the person's intention. Thus, they explain that, internal control beliefs are connected to personal know-hows and capabilities of an individual such as possessing self-confidence to undertake an entrepreneurial effort and external control is considered more of situational control. An individual's perception of the importance of having financial aid to venture a business can be taken as an ideal example for external behavioural control. Furthermore, Mumtaz et al., (2012) in their study discovered that behavioural control has a positive association with intention towards entrepreneurship such as in terms of risk taking and creativity.

2.1.5. Personal Attitudes

Personal attitude is a subjective and own evaluation of the consequences of an individual's intended behaviour, which finally defines how much the particular person adores or dislikes that behaviour (Ajzen, 1991). Moreover, as claimed by Ajen, (1991), Attitude toward behaviour is considered "the level of one's favourable or unfavourable evaluation or appraisal of the behaviour in question". It embodies one's way of assessing and comparing a thing against the other available options on the basis of his or her thoughts (cognition), beliefs (what the individual values) and emotions (his/her affection) towards the thing/object (Hoyer and Maclnis, 2004). Therefore, an individual's personal attitudes could be formed or changed through

social standards and norms in developing his/her intention to embrace entrepreneurship. Furthermore, as per the study conducted by Mumtaz et al. (2012) using undergraduate students, found that the favourable attitude of those students has a positive influence on the intention to choose entrepreneurship as a career.

2.1.6. Entrepreneurial Intentions

According to Isiwu & Onwuka, (2017), entrepreneurial intention is defined as "one's desire, wish and hope of becoming an entrepreneur". It could be considered a rapidly evolving area of research within the field of entrepreneurship, along with a rising number of studies which are based on Entrepreneurial Intentions (Fayolle and Liñán, 2014). The emphasis of entrepreneurship therefore is to, possess entrepreneurial intentions before initial start-up of the business as it is considered the starting point of a new business creation. According to Haynie et al (2010), entrepreneurial movement has its perceptive origin in that individual's attitudes and motivation, which triggers behaviour to navigate him/herself towards the entrepreneurial objective. The related literature on entrepreneurial intentions stipulates the importance of self-employment intentions (Fridoline, 2009) and thus, as per Weerakoon and Gunatissa, (2014) the identification of such intentions will permit the scholars to discover the dynamic forces of creating new ventures.

2.7 Summary

Entrepreneurial intentions have been discussed by several studies and the impact of education level, family background and geometric factors have been explored in several industries to access the structural relation from different aspects. Furthermore, the barriers to create entrepreneurial ideas in several fields were also discussed under the area of entrepreneurial intentions. However, the digitalization on entrepreneurial intentions is not clearly evaluated in university level and furthermore; it has not been applied structural equation modelling to identify the factors which effect on entrepreneurial intentions and digitalization in university education. Therefore, employee educational support, relational support, structural support, personal attitudes and behaviour control are considered as the variables for this study.

CONCEPTUALIZATION AND RESEARCH

3.1 Introduction

This chapter incorporates the methodology applied in the design of the study and incorporates the accompanying: conceptual framework, hypothesis and design of the research, covered population, and respective sample. Furthermore, operationalization of the questionnaire, design of the survey, the process of data collection, and method of data analysis are provided.

The data which was gathered via questionnaire had to be dissected contrasting with one another variables and the similarities were taken up and stuck up for information mining. The data mining-based patterns produced through IBM® SPSS® Statistics 22 and statistical R. Then recognized patterns in information focuses were assessed and quantitatively dissected for finding an answer for the distinguished issues.

3.2 Conceptual Model

Considering comprehension and blend of previous writing on how explicit factors (Independent and Dependent) interface with one another in the study are spoken to in the conceptual framework. The conceptual framework *"sets the stage"* for the introduction of the specific research question that drives the examination being accounted on the problem statement (McGaghie, Bordage, & Shea, 2015).

Researcher has skilful to design the connection between independent and dependent variables as per conceptualizing the study. Behavioural Control and Attitudes are the mediating variables for the study. Educational Support, Structural Support and Relational Support are the explanatory variables and Entrepreneurial Intentions is the predictor variable. This structure would permit to explain the findings in a more comprehensive manner.

Based on the understanding and summary of the literature, the conceptual framework of the study is represented by independent and dependent variables which relate to each other in the study.

The conceptual framework used in this study is illustrated in Figure 1.

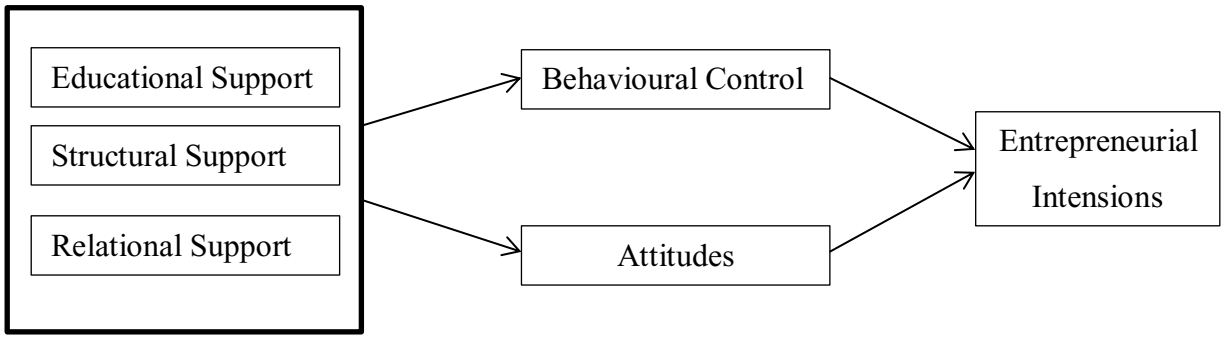


Figure 1: Conceptual Framework

Source: Author Developed

3.3 Working definitions of study variables

3.3.1 Educational Support

Previous research found that educational support is a crucial factor for entrepreneurial intentions (Turker and Selcuk 2009). Related courses, workshops on being an entrepreneur, skills and attitudes to be an entrepreneur etc. is some clear examples for it. Turker and Selcuk found that university education is an efficient way to acquire and observe the knowledge which is needed to be an entrepreneur. Henderson and Robertson (2000) argued that although the university education provides theoretical aspects of the entrepreneurial activities, educationist can provide the background for entrepreneurial intentions. For example, digitalized teaching materials and digitalized classrooms can be used in university education system.

3.3.2 Relational Support

Relational Support (RS) implies the support gained from family and friends to be an entrepreneur. Close relationships can encourage involving in entrepreneurial activities. Literature found that the probability of become an entrepreneur is higher when his family member is an entrepreneur (Colombier and Masclet, 2008; Lindquist

et al., 2015). Furthermore, social relationships built through social media can influence for entrepreneurial intentions.

3.3.3 Structural Support

Structural Support (SS) mentions about the environment which the entrepreneurial activities and ideas raised. For instance, motivation, culture and organizational support can be specified as some requirements to be an entrepreneur.

3.3.4 Personal Attitudes

Attitudes are the mental perspective of individuals have towards others and the current conditions prior to settling on choices or decision that result in behaviour. People basically structure their attitudes from hidden values and beliefs.

However, factors which might not have been disguised as values and beliefs can in any case impact an individual's attitudes at the point of decision-making. Ordinary impacts incorporate the craving to please, convenience, political correctness, accommodation, peer pressure, and mental stressors.

3.3.5 Perceived Behavioural Control

Perceived Behavioural Control (PBC) refers to the subjective assessment of an individual's ability and ease or difficulty to perform a particular behaviour. Simply put, it is the perceptions of people's capability to perform a given behaviour.

As explained in the similar type of theory; the theory of self-efficacy, which defines as "an individual's belief that he or she is capable of performing a task", perceived behavioural control is a belief of an individual's perceived personal affluence or difficulty to perform entrepreneurial behaviour.

It needs to be differentiated between internal and external control beliefs which can impact the person's intention. Internal control beliefs are associated with the personal proficiency and capabilities such as possessing self-confidence to undertake an entrepreneurship effort and external control is linked to situational control such as perceiving financial support as an important requirement to venture a business.

3.3.6 Entrepreneurial Intention

Entrepreneurial Intention is considered a person's aspiration, wish and hopefulness of becoming an entrepreneur. It can be identified as the starting point of the process of new business creation. When it comes to the perspective of entrepreneurship, entrepreneurial intention is identified as "self-acknowledged conviction" by people who wish to start up a new venture along with the continuous plan and dedication to attain that willingness. People with self-employment aspirations tend to have this intentionally planned behaviour before initiating a new business entity.

3.3.7 Operationalization:

Variable	Indicators	Question Number
Educational support	Creative ideas, Skills and abilities	19-20
	Necessary knowledge	21
	ICT Facilities	22—25
Relational support	Motivation	26
	Relational Support	27-30
Structural support	Open opportunities in the organizations	31-32
	Support from Digitalization	33-34
Personal attitudes	Satisfaction and social status	35-37
	Pros and cons of being an entrepreneur	38
	Own firm	39
Perceived behavioural control	Viable and creation of new firm	40-41
	Have a basic knowledge on	42-43

	start a firm	
	Positive thinking	44-45
Entrepreneurial intention	Challenging and self-encouragement Personal goals	46-48
	Personal goals	49-51

3.4 Hypothesis Development

Eight hypotheses were implemented according to the designed conceptual framework shown in Figure1 and based on the findings of the literature review. Defined alternative hypothesis as follows:

$H_{1:}$ Attitudes have an impact on entrepreneurial intention.
$H_{2:}$ Behavioral Control has an impact on entrepreneurial intention.
$H_{3:}$ Education Support has an impact on Attitudes
$H_{4:}$ Structural Support has an impact on Attitudes.
$H_{5:}$ Relational Support has an impact on Attitudes.
$H_{6:}$ Education Support has an impact on Behavioral Control
$H_{7:}$ Structural Support has an impact on Behavioral Control
$H_{8:}$ Relational Support has an impact on Behavioral Control

3.5 Research Strategy and Design

While considering the four fundamental sorts of examination plans named as descriptive research, quantitative research, causal - comparative / quasi-experimental research, correlational research, and experimental research, it was clear from the underlying phases of the data collection process, that the analysis technique ought to be a mix-up or hybrid of previously mentioned four research design types.

The data which was gathered via survey must be dissected contrasting with one another variables and the likenesses product taken up and stuck up for data mining. The data mining-based patterns generated via IBM® SPSS® Statistics 22 and R. Structural Equation Modelling was carried out by Statistical Coding in R. Finally, identified major points were assessed and quantitatively investigated for finding an answer for the distinguished effects.

3.6 Research Method

3.6.1 Target Population and Sample

The focused-on population for this study was 300 students at University and as indicated by the Morgan table, 265 respondents were chosen as the sample through following simple random sampling technique.

3.6.2 Data Sources

Primary source or secondary source can be either from of data sources in a research. Primary data recognize as the data got direct by the researcher on the variables of interest for the particular reason for the study. On the other hand, secondary data is data assembled from sources previously existing. Primary data it is supposed to gather for this study via survey.

3.6.3 Data Collection Procedure

Primary data were collected mainly through a survey for this study. The survey technique was picked to gather information to accumulate more solid data accepting the namelessness of the respondents.

3.6.4 Questionnaire Design

The questionnaire was designed with 51 questions with six sections: the first section was to gather respondent demographic details whereas next five sections were to measure Educational Support, Relational Support, Structural Support, Personal Attitudes, Perceived Behavioural Control and Entrepreneurial Intention based on Likert Scale method. Educational support has been measured through the questions which covered the areas of Creative ideas, Skills and abilities, Necessary knowledge and ICT Facilities. Relational Support has been measured through covering the respondents' motivation along with some questions to cover directly the support given for them from their relations. Structural support has been measured with

questions from the areas of open opportunities in the organizations and support from digitalization. Satisfaction and social status, pros and cons of being an entrepreneur, own firm are the indicators which were covered in the questionnaire to measure respondents' personal attitudes. Perceived behavioural control has been assessed through some questions from the areas of viable and creation of new firm, having a basic knowledge on staring a firm and positive thinking and finally, the entrepreneurial intention has been measured by covering the areas of challenging and self-encouragement and personal goals indicators. The Likert Scale assesses the peculiarity of respondents agree or disagree to given claims on the questionnaire in a 5-point scale. Respondents of the sample could indicate their opinions as Strongly Agree, Agree, Neutral, Disagree and Strongly Disagree.

3.7 Method of Data Analysis

3.7.1 Data Screening

IBM® SPSS® Statistics 22 statistical software program was used to analyse the data. When the data was gathered from the ended surveys, the data was dissected to figure out which, assuming any, reactions ought to be wiped out. Respondents who wouldn't consent to the informed assent area were wiped out alongside the individuals who left from the study with incomplete status. The time span to finish the answering the survey and straight covering of the appropriate responses were additionally inspected. Respondents who took under four minutes to finish answering the questionnaire were wiped out from the data results.

3.7.2 Univariate Analysis

Three variables in the conceptualization model and demographic factors of the examined sample were investigated using Descriptive Statistical Method: frequency distributions were plotted using Pie charts for categorical variables, histograms for ordinal variables and frequency distribution tables for ratio variables. Moreover, continuous variables were explained using dispersion measurements and central tendency measurements of data.

Central tendency and dispersion measurements were calculated for every variable built in the research design. Since all the measurements were taken in the five linear Likert scale, the original scale given by the respondent was considered as the

measure of the central tendency. And, the dispersion of data was analysed by interpreting Standard Deviation and Variance.

3.7.3 Data Representation Techniques

Data given as a description were translated to information and presented in verbal manner under point forms frames inside and out the dissertation at necessary point of view.

The computer generate data was converted to the graphical format through IBM® SPSS® Statistics 22 statistical software and presented at the fourth chapter. Coloured and informative graphical illustrations were included as a convenient method of representing data.

3.7.4 Reliability and Validity testing

Cronbach's alpha (α) is tested to measure the reliability of scales. As recommended by Bryman and Bell (2011), estimation values of $\alpha > 0.8$ are ordinarily employed as a guideline for acceptable internal reliability, however it is acknowledged somewhat 95 lower figures.

3.7.5 Structural Equation Modelling

The analysis of data has primarily focused on the tests for errors and scale filtering, tests for multivariate assumptions, i.e. tests for normality, linearity, homoscedasticity and multi-collinearity. Explanatory Factor Analysis and Confirmatory Factor Analysis have been done by using R software.

3.7.6 Bivariate Analysis

This contains a group of statistical techniques that examine the relationship between the dependent and independent variables. Simply put, bivariate analysis allows taking a nearer look at the relationship between Entrepreneurial Intention variable and Educational Support, Relational Support, and Structural Support, variables.

It is conducted in this study to determine whether a statistical relationship exists between the variables. If so, the degree of association and whether one variable may be predicted or speculated from another.

3.7.7 Pilot Test

A pilot survey is supposed to do in this study using IBM® SPSS® Statistics 22 statistical software program. The motivation behind having this sort of a pilot test for this exploration is to acquire a few focal points. Fundamentally, pilot test helps characterize the research question and test the study design and process of the study suggested and simultaneously, it tends to be resolved the feasibility of the study without burning through assets and time.

3.8 Summary

According to the methodology of this study, it explained the conceptual framework of the study, hypotheses and design of the research, population, and considered sample. Likewise, an outline of the instrumentation, design of the survey, data gathering procedures, and data exploration is mentioned clearly. As per the method which research is directed, absolutely it is a quantitative analysis by giving more thought to quantitative methods instead of subjective procedures.

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter includes demographic variable analysis of the sample, descriptive analysis of ratio variables of the sample, correlation analysis, hypothesis testing, SEM and regression analysis results. R Statistical Software was used to analyse the data.

4.2 Analysis of the Demographic Variables

The composition of the sample was analyzed with respect to demographic variables: Age, Gender, Educational Level, Relationship Status and some other personal details to summarize some questions on entrepreneurial background of respondents as follows.

Age:

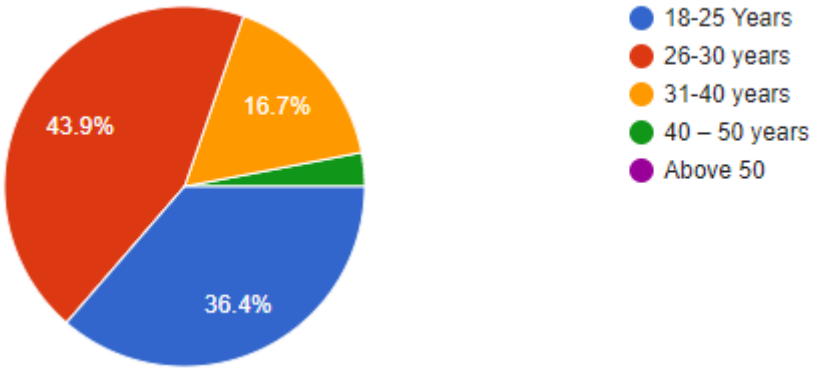


Figure 2: Pie Chart for the variable Age

According to the Figure 2, the sample has five age categories as 18-25 years, 26-30 years, 31-40 years, 41-50 years and 50 and above years. The majority of the sample was respondents between 26-30 years. On the other hand, there are no people above 50 years. It can be stated that the majority of the people who follow entrepreneurship practices are middle-aged people.

Gender:

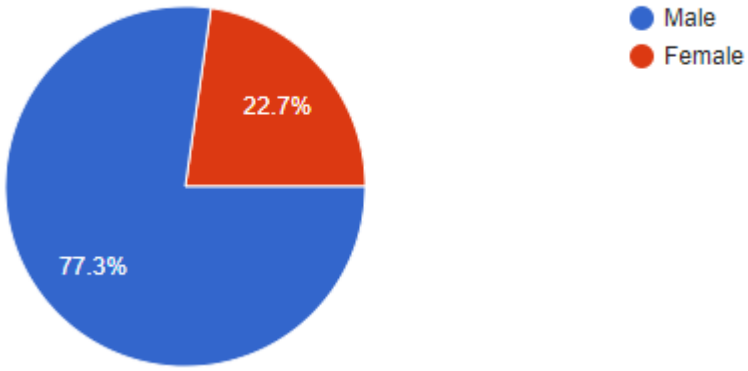


Figure 3: Pie Chart for the variable Gender

Figure 3 illustrates that most of the sample was represented by males, who were more than 77% of the respondents in the sample, while only 22.7% represented by female respondents. Hence, it can be identified that most of the males try to start new business from their own capacity while less of the female try to have their own business.

Education Level

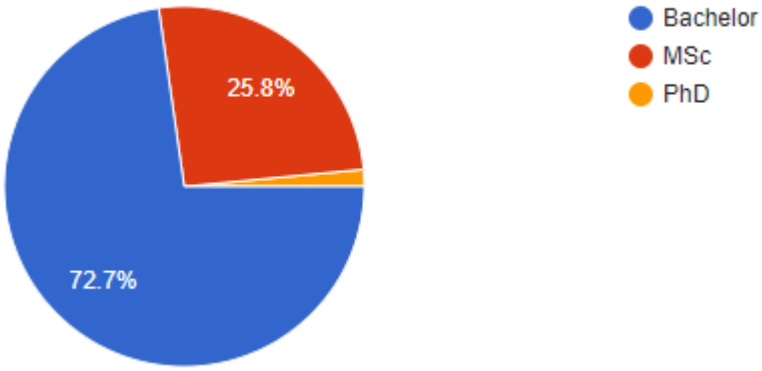


Figure 4: Pie Chart for the variable Education Level

According to Figure 4, most of the people who practise entrepreneurial skills have a bachelor's degree. People who have an MSc are 25.8%, and the percentage of people who completed PhD is only around 2%.

Relationship Status

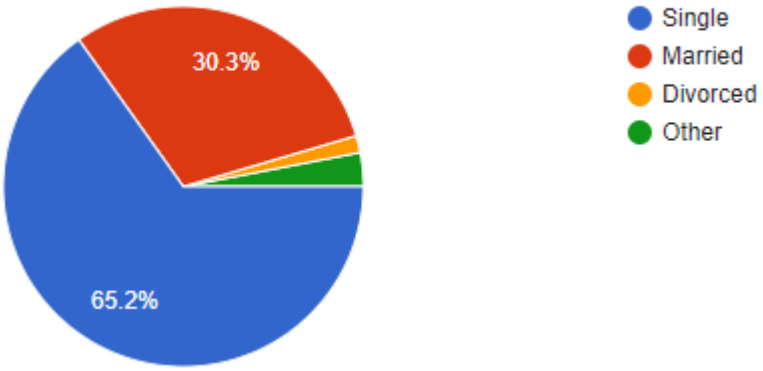


Figure 5: Pie Chart for the variable Relationship Status

The pie chart gives the relationship status of the respondents in the field of entrepreneurship. As per the diagram, 65.2% of people are single while 30.3% of respondents are married. However, it can be identified that a smaller percentage of employees are divorced and other status.

Employment

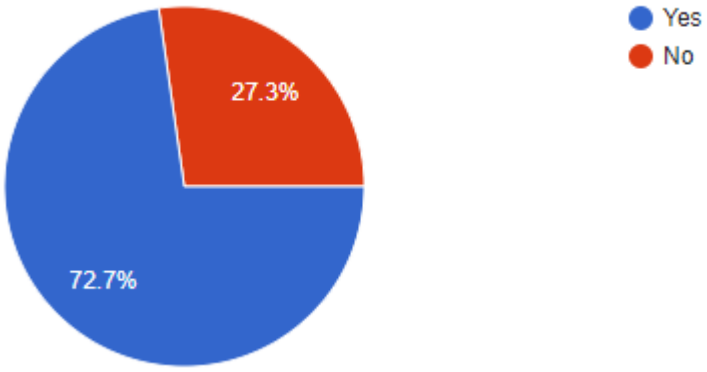


Figure 6: Pie Chart for the variable Employment

According to Figure 6, more than 72% of respondents are employed while 27.3% of them are not employed.

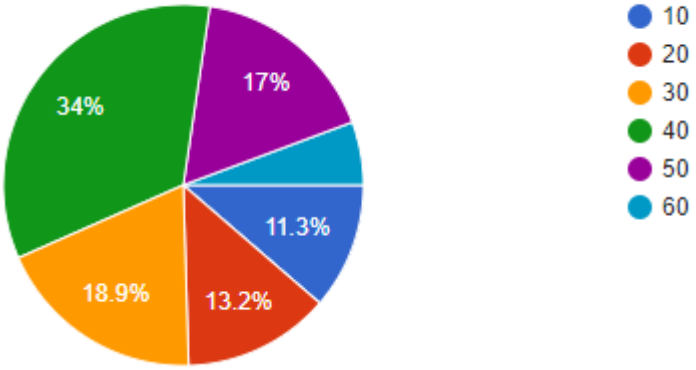


Figure 7: Pie Chart for the variable number of working hours per day

As per figure 7, most of the respondents work for 40 hours per week. It is illustrated as 34% of the total respondents of this study.

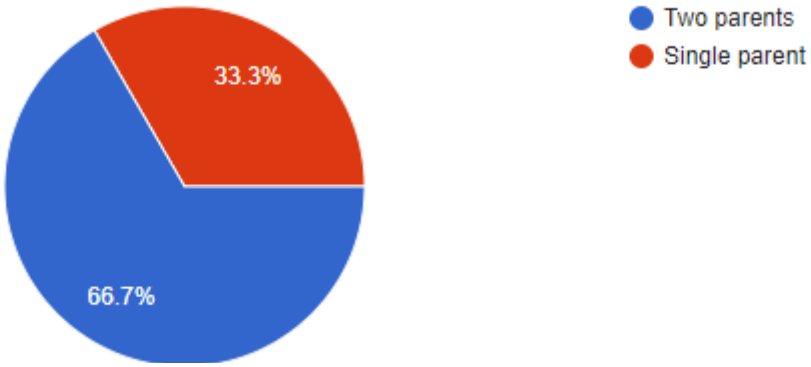


Figure 8: Pie Chart for the variable family structure of the respondent

Figure 8 indicates the family structure of the respondent and more than 66% of respondents have their two parents while 33.3% of the respondents are single parent. Furthermore, figure 9 indicates that majority (84.6%) of these respondents live in urban area.

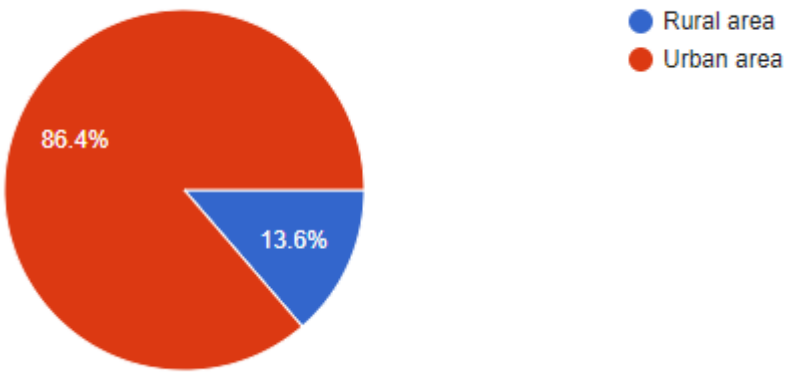


Figure 9: Pie Chart for the variable living area

4.3 **Descriptive Analysis Variables**

Table 1: Descriptive Statistics of Variables

	N	Mean	Std. Deviation	Minimum	Maximum
Educational support	66	2.654	0.992	1.000	5.000
Relational support	66	2.542	1.108	1.000	5.000
Structural support	66	2.458	1.074	1.000	5.000
Personal attitudes	66	2.200	1.212	1.000	5.000
Perceived behavioural control	66	2.833	1.051	1.000	5.000
Entrepreneurial intention	66	2.616	1.238	1.000	5.000

Table 1 gives the information on basic statistics such as mean, minimum, maximum, and standard deviation of educational support, relational support, structural support, personal support, perceived behavioral control, and entrepreneurial intension. Mean values for the variable educational support, relational support, perceived behavioral

control, and entrepreneurial intension are above 2.5 explained that most of the respondents in the sample rated strongly agree or agree as to their response to the mentioned four variables. However, the variable structural support and personal attitudes shows below 2.5 for the average and it implies respondents rated strongly disagree or disagree for the two variables. Furthermore, the highest variation of respondents' rates is taken by the variable entrepreneurial intension (1.238), and the minimum is recorded by educational support (0.992).

4.4 Exploratory Data Analysis

Exploratory Data analysis is carried out using R statistical software. The impact of exploratory variables and mediating variable on the study's dependent variable is measured using hypothesis testing.

4.4.1 Reliability Analysis

Table 2: Reliability Analysis

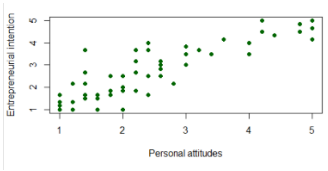
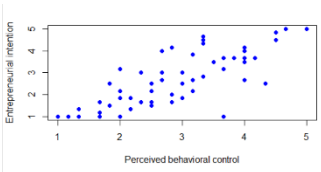
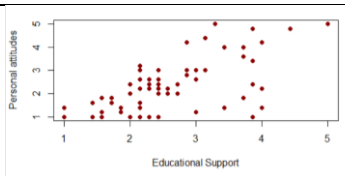
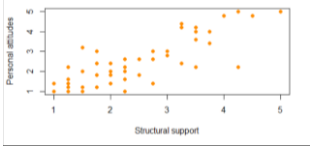
Index	Number of Items	Cronbach's Alpha Coefficient
Educational support	7	0.92
Relational support	5	0.91
Structural support	4	0.89
Personal attitudes	5	0.95
Perceived behavioural control	6	0.93
Entrepreneurial intention	6	0.95

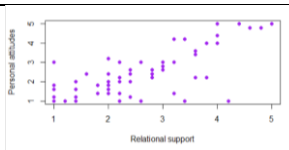
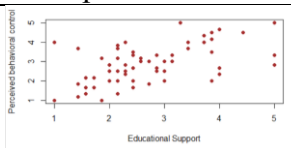
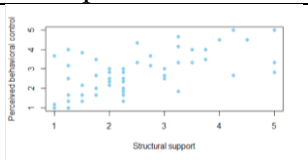
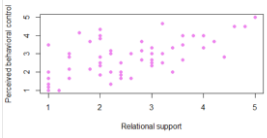
Reliability analysis is performed to Educational support, Relational support, Structural support, Personal attitudes, Perceived behavioural control, and Entrepreneurial intention. According to the Cronbach's Alpha coefficient for all six variables mentioned above were higher than 0.8, the items' reliability (questions) was proved. Therefore, these six indices were developed and namely accordingly. Then eight hypotheses were developed and tested as below.

4.4.2 Hypothesis Testing

Eight hypotheses were implemented according to the designed conceptual framework shown in Figure1 and based on the findings of the literature review.

Table 3: Summary of Hypothesis

Hypothesis	Scatter plot with correlation value	Result
$H_{10:}$ Attitudes have an impact on entrepreneurial intention	 $\rho = 0.89$ p-value = 0.000	Rejected
$H_{20:}$ Behavioral Control has an impact on entrepreneurial intention.	 $\rho = 0.82$ p-value = 0.000	Rejected
Education Support has an impact on Attitudes	 $\rho = 0.71$ p-value = 0.000	Rejected
Structural Support has an impact on Attitudes	 $\rho = 0.83$ p-value = 0.000	Rejected

Relational Support has an impact on Attitudes.	 $\rho = 0.76$ p-value = 0.000	Rejected
Education Support has an impact on Behavioral Control	 $\rho = 0.60$ p-value = 0.000	Rejected
Structural Support has an impact on Behavioral Control	 ρ=0.61 p-value = 0.000	Rejected
Relational Support has an impact on Behavioral Control	 ρ=0.69 p-value = 0.000	Rejected

All the eight hypotheses are rejected since corresponding p-values are less than desired 5% significant level.

4.5 Structural Equation Modelling

4.5.1 Explanatory Factor Analysis (EFA)

Exploratory factor analysis is a statistical approach for condensing data into a lower number of summary variables in order to investigate the phenomena's fundamental theoretical structure. It's utilized to figure out how the relationship between the variable and the respondent is structured. Here, EFA has been conducted for the six variables to identify the hidden factors.

4.5.2 KMO Statistic Test

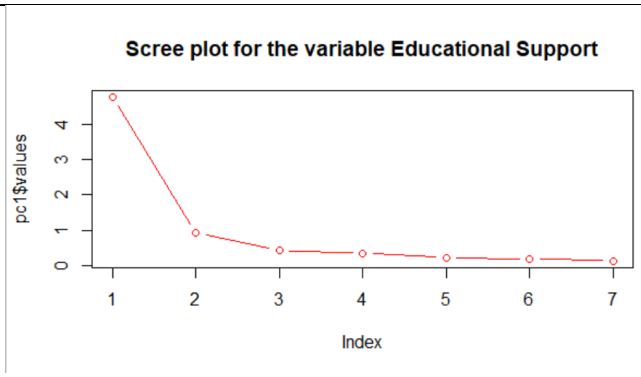
Table 4: KMO Statistic Results

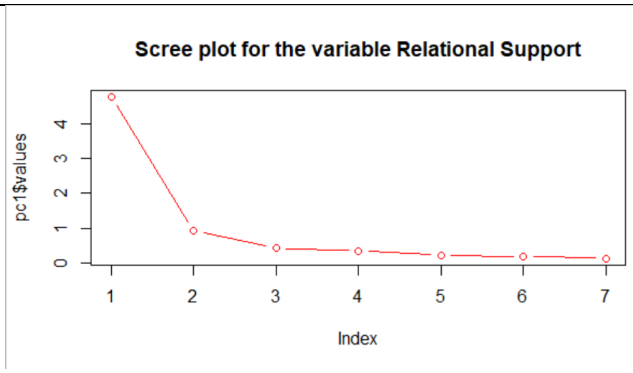
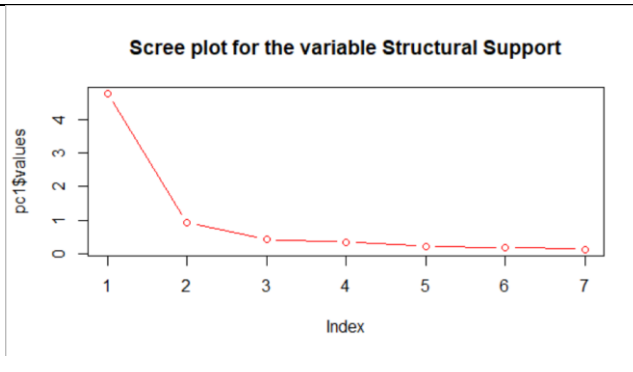
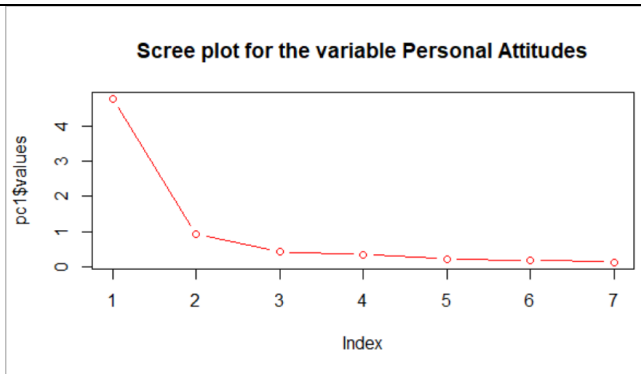
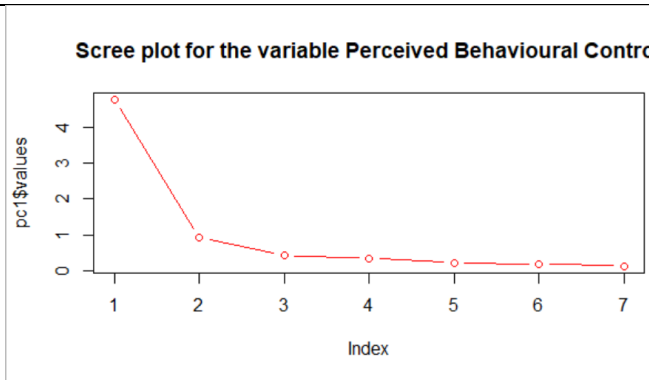
Index	KMO test statistic
Educational support	0.86
Relational support	0.88
Structural support	0.87
Personal attitudes	0.85
Perceived behavioural control	0.90
Entrepreneurial intention	0.90

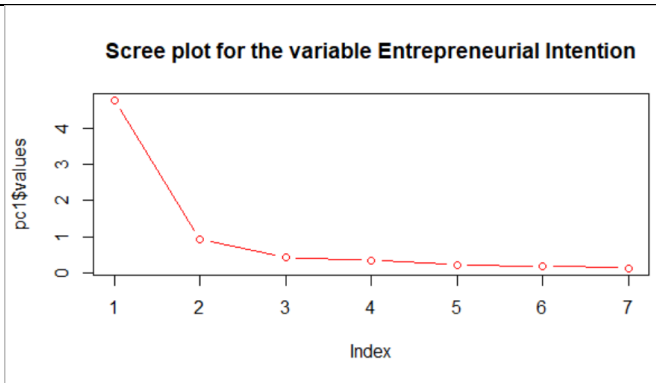
Table 4 gives the information on the KMO for the six variables. The sample adequacy test (KMO) value were 0.86, 0.88,0.87,0.85,0.90 and 0.90 for the educational support, relational support, structural support, personal attitudes, perceived behavioural control and entrepreneurial intention, respectively. The fact is that all six KMO values are higher than 0.80 indicates that the variables are related to each other, share a common factor, and patterned relationships between items.

4.5.3 Scree plot to identify the optimum number of factors

Table 5: Optimal Number of factors

Index	Scree plot	The optimum number of factors
Educational Support		4

Relational Support		4
Structural Support		4
Personal Attitudes		4
Perceived Behavioural Control		4

Entrepreneurial Intention		4

Illustrated three scree plots in table 5, we could find the point of inflexion (around the third point to the left) for all six variables. The evidence from the scree plot and from the eigenvalues suggests a four-component solution may be the best.

4.5.4 Explanatory Factor Analysis for the measure of Educational Support

Table 6: EFA for the Educational Support

Rotated Component Matrix	1	2
Q19		0.86
Q20		0.89
Q21		0.77
Q22	0.85	
Q23	0.67	
Q24	0.89	
Q25	0.88	

According to the results obtained from principal component analysis and varimax rotational method, we could find the questions that load highly on factor 1 are "The education in university encourages me to develop creative ideas for being an entrepreneur" and "My university develops my entrepreneurial skills and abilities" with the lowest loading of 0.77. All these items seem to relate to developing abilities and skills through education. Therefore, we might label this factor abilities and skills through education. Similarly, we might label factor 2 as IT facilities through education.

4.5.5 Explanatory Factor Analysis for the measure of Relational Structure

Table 7: EFA for Relational Structure

Rotated Component Matrix	1	2
Q26	0.91	
Q27	0.76	
Q28	0.72	
Q29	0.64	
Q30		0.92

According to the results obtained from principal component analysis and varimax rotational method, we could find four questions that load highly on factor 1. All these items seem to relate to support given by close ones. Therefore, we might label this factor Relational structure on family, friends and relatives. Similarly, we might label factor 2 as IT facilities at home/workplace.

4.5.6 Explanatory Factor Analysis for the measure Structural Support

Table 8: EFA for Structural Support

Rotated Component Matrix	1	2
Q31		0.91
Q32		0.83
Q33	0.89	
Q34	0.92	

Table 8 indicates the results obtained from principal component analysis and varimax rotational method. We could find two factors where first two questions on factor 1 and other two questions on factor 2. “The economy provides many opportunities for entrepreneurs” with the highest loading of 0.91 and “Entrepreneurs are encouraged by a structural system that includes private, public, and non-governmental organizations” with loading of 0.83. All these items seem to relate to support given by the society, government or any other outsiders. Therefore, we might label this factor structural support given by outsiders. Furthermore, the other factor can be labelled as structural support towards IT.

4.5.7 Explanatory Factor Analysis for the measure Personal Attitudes

Table 9: EFA for Personal Attitudes

Rotated Component Matrix	1	2
Q35		0.66
Q36	0.88	
Q37	0.84	
Q38		0.88
Q39		0.71

As per the table 9, two different factors can be identified by the factor loadings. The first factor includes two questions, and this factor can be labeled as personal intension on my career. The second factor includes three questions and all of them related to job satisfaction and status. Hence the second factor can be labeled as personal attitudes on job satisfaction and status.

4.5.8 Explanatory Factor Analysis for the measure Perceived Behavioral Control

Table 10: EFA for Perceived Behavioural Control

Rotated Component Matrix	1	2
Q40		0.92
Q41	0.68	
Q42	0.91	
Q43	0.84	
Q44		0.63
Q45	0.62	

Table 10 summarized the factor loadings of the variable perceived behavioural control. According to the loading values, two different factors can be identified, and they can be labelled as behaviroural control on personal motivation and awareness on entrepreneurial projects.

4.5.9 Explanatory Factor Analysis for the measure Entrepreneurial Intention

Table 11: EFA for Entrepreneurial Intention

Rotated Component Matrix	1	2
Q46		0.88
Q47	0.71	
Q48	0.90	
Q49	0.76	
Q50		0.74
Q51		0.68

Table 11 explains the factor loadings on entrepreneurial intensions. Two different factors can be identified as per the Table 11. The first factor can be labelled as personal intension to be an entrepreneur and it includes three questions. The other factor also includes three questions and it can be named as personal commitments to be an entrepreneur.

4.5.10 Confirmatory Factor Analysis

Table 12: CFA results

Index	square of residuals (RMSR)	Chi-Square Test Statistic	P-value
Educational support	0.06	8.4	< 0.400
Relational support	0.06	5.05	< 0.025
Structural support	0.06	2.47	< 0.001
Personal attitudes	0.05	3.36	< 0.067
Perceived behavioural control	0.05	5.37	< 0.250
Entrepreneurial intention	0.03	2.22	< 0.001

As per table 12, the root means the square of residuals (RMSR) is below 0.075. This is acceptable since the value should be closer to 0.

4.5.11 Covariance among variables

Table 13: Covariance Matrix for identified factors

	Educational support		Relational support		Structural support		Personal attitudes		Perceived behavioural control		Entrepreneurial intention	
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
F1: Abilities and skills through education	1.00											
F2: IT facilities through education	0.68	1.00										
F3: Relational structure on family	0.50	0.68	1.00									
F4: IT facilities at home/workplace	0.36	0.80	0.71	1.00								
F5: Structural support given by outsiders	0.69	0.72	0.58	0.62	1.00							
F6: Structural support towards IT	0.47	0.77	0.69	0.86	0.66	1.00						
F7: Personal intension on my career	0.45	0.77	0.68	0.88	0.63	0.84	1.00					
F8: Personal attitudes on job satisfaction and status	0.53	0.72	0.61	0.79	0.68	0.78	0.86	1.00				

F9: Behaviroural control on personal motivation	0.49	0.60	0.61	0.60	0.61	0.60	0.70	0.74	1.00			
F10: Awareness on entrepreneurial projects	0.46	0.55	0.63	0.50	0.50	0.49	0.58	0.62	0.80	1.00		
F11: Personal intension to be an entrepreneur.	0.45	0.74	0.61	0.73	0.59	0.70	0.83	0.81	0.76	0.78	1.00	
F12: Personal commitments to be an entrepreneur.	0.47	0.70	0.59	0.74	0.58	0.74	0.84	0.87	0.73	0.75	0.88	1.00

Table 13 shows the results of covariance among the variables. It was examined bivariate correlation shows that variables were significantly correlated with each other.

4.6 Multiple Regression Analysis

The calculated R square is 0.8888, which indicates 88.88% of the dependent variable: entrepreneurial intension is explained by identified significant independent variables: F2: IT facilities through education, F3: Relational structure on family, F7: Personal intension on my career, F8: Personal attitudes on job satisfaction and status, and F10: Awareness on entrepreneurial projects. In contrast, 11.12% of the entrepreneurial intension is not explained by identified independent variables.

```
Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) -0.13052    0.16752  -0.779  0.43926
f1          -0.09935    0.08231  -1.207  0.23257
f2           0.25171    0.11536   2.182  0.03340 *
f3          -0.16842    0.07769  -2.168  0.03453 *
f4          -0.07900    0.11474  -0.689  0.49402
f5          -0.04388    0.07671  -0.572  0.56959
f6           0.07157    0.09248   0.774  0.44229
f7           0.37859    0.11310   3.347  0.00148 **
f8           0.31619    0.09157   3.453  0.00107 **
f9          -0.08931    0.09484  -0.942  0.35049
f10          0.53206    0.08457   6.291 5.42e-08 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.4126 on 55 degrees of freedom
Multiple R-squared:  0.9059,    Adjusted R-squared:  0.8888
F-statistic: 52.97 on 10 and 55 DF,  p-value: < 2.2e-16
```

Figure 10: Results for Multiple Regressions

Furthermore, the p-values of the f2, f3, f7, f8 and f10 are statistically significant since its p-value (0.05) is less than the desired 5% significant level. Therefore, the regression equation can be derived as:

$$E\text{ntrepreneurial Intension} = -0.13052 + 0.25171\,F2 - -0.16842\;F3 + 0.37859\,F7 + 0.31619F8 + 0.53206\,F10$$

$$E\text{ntrepreneurial Intension} = -0.13052 + 0.25171\ (\text{IT facilities through education}) - 0.16842\ (\text{Relational structure on family}) + 0.37859\ (\text{Personal intension on my career}) + 0.31619(\text{Personal attitudes on job satisfaction and status}) + 0.53206\ (\text{Awareness on entrepreneurial projects})$$

According to the equation built above, It can be explained that when one unit of IT facilities through education, relational structure on family, personal intensions on my career, personal attitudes on job satisfaction and status and finally awareness on entrepreneurial projects changes, the entrepreneurial intensions will be increased by 25.17%, decreased by 16.84%, increased by 37.86% , increased by 31.62% and increased by 53.21% respectively.

4.7 Summary

Demographic variables analysis is done in this chapter using visual interpretations, mean, min, max and standard deviation. Associations between indices were identified using scatter plots. Furthermore, the status of the hypotheses test was evaluated and all of them were rejected. Finally, explanatory and confirmatory factor analysis done under SEM and multiple regression analysis are conducted. It indicated that 88.88% of the Entrepreneurial Intensions could be explained by IT facilities through education, Relational structure on family, Personal intension on my career, Personal attitudes on job satisfaction and status, and Awareness on entrepreneurial projects.

CONCLUSION AND RECOMMENDATIONS

5.1 Summary of the Study

This study was carried out to explore how digitalization effect entrepreneurship intention. Some educational institutes improve their degree programs and curriculums by including theories and practices belong to start a business or develop a family business. Technology has been popped up as a key development in most areas, including entrepreneurship. Therefore, the study was conducted to propose suggestions to improve significant factors which affect entrepreneurial intentions, especially in digital technologies such as the internet, smartphones, Google Drive, smart apps etc.

Educational support, Structural support and Relational support are the three independent variables in this study. Altogether, fifteen questions are included in the questionnaire to cover these three independent variables under three indicators for educational support, while each relational and structural support has two indicators separately. Behavioural control and attitudes are the mediation variables, where each of them has three indicators. The three indicators belong to behavioural control: viable and creation of the new firm, have basic knowledge on start firm, and positive thinking. On the other hand, satisfaction and social status, pros and cons of being an entrepreneur and own firm are the three indicators in personal attitudes. The entrepreneurial intention was the dependent variable of this study, and it had two different indicators specified as challenging and self-encouragement and personal goals. In conceptualizing the study, it implemented the association between independent, mediation and dependent variables. Behavioural control and attitudes are the mediating variables for the study. Educational support, Structural support and Relational support are the independent variables, and Entrepreneurial intension is the dependent variable. It would enable us to interpret the findings more comprehensively.

5.2 Discussion of key findings and answering the research questions

This research study was designed to find the answers to three questions, and there are nine research objectives identified in the study. The study's main objective is to identify the impact of digitalization on entrepreneurial intensions with three support variables, attitude and behavioural control, using a sample of data collected from a university and then suggest important insights on the importance of digitalization on entrepreneurial activities intentions. The sub-objectives are to explore the influence of demographic factors on entrepreneurial intention and check the pairwise impact between identified three types of variables.

Eight hypotheses were implemented with these objectives, and they were tested using Pearson correlation analysis. Further, explanatory factor analysis and confirmatory factor analysis were carried out under structural equation modelling. Finally, multiple regression analysis was done to measure the impact of identified factors on entrepreneurial intention. According to the Morgan table, the study focused on 300 students at university students, and 265 respondents were selected as the sample. Here, the simple random sampling technique is used to choose the sample, since all the university students have similar qualifications, skills, and facilities to be an entrepreneur.

The data were collected through a questionnaire which has 51 questions with seven sections: the first section was to collect respondent demographic details, whereas the next six sections were to gather data on Educational Support, Relational Support, Structural Support, Personal Attitudes, Perceived Behavioural Control and Entrepreneurial Intention based on five-point Likert Scale method divided as strongly agree, agree, moderate, disagree and strongly disagree. A pilot survey is done, and the normality of data distribution is ensured. Then the target numbers of respondents were covered to collect data. After clearing the data, descriptive statistical methods such as frequency distributions, central tendency measurements and dispersion measurements were applied to have a basic idea and interpretation of the data.

According to the study findings, demographic variables included Age, Gender, Educational Level, Relationship Status and some other personal details of the

students in a particular university. In terms of age, the majority of the sample was respondents between 26-30 years, while there are no people above 50 years in the sample. In other words, it can be identified that students whose ages between 26-30 representing the majority of the selected university students. In terms of gender, males were the majority of the sample, almost 77% of the sample respondents, while only around 22% accounted by female respondents. In terms of the student's education level, more than 72% of students were following their bachelor's degree while 25.8% of students reading for their masters. The sample represented 65.2% of single students in terms of relationship status, while about 30% got married. There is a small percentage of students in the category of divorced as well. As per the analysis, more than 72% of students were employed while the rest of the students were unemployed. The most of students who were employed, work around 40 hours per week. In terms of the family structure, more than 66% of respondents have their two parents while 33.3% of the respondents are a single parent. Furthermore, according to the descriptive analysis, the majority (84.6%) of students live in an urban area.

According to the central tendency measurements, most of the students rated agreed on their response for three independent variables, two mediating variables and the dependent variable. According to the dispersion measurements, the highest deviation of students' rates is accounted by the dependent variable: entrepreneurial intension, while the lowest is recorded by an independent variable: educational support.

Scatter plots were illustrated to visualize the association between study variables. All eight scatter plots related to the corresponding null hypothesis indicated that their dots had been plotted closer to each other and closer to the right corner, which can be clearly divided into two different categories. It can be decided that there could be a strong or moderate positive correlation between particular pair of variables.

R statistical software is used to carry out the exploratory data analysis. The exploratory data analysis focused on reliability analysis, hypothesis testing, explanatory and confirmatory factor analysis, and finally, SEM. The reliability analysis is performed on all three independent variables, two mediating variables,

and the dependent variable. The Cronbach's alpha coefficient for all six variables mentioned above was higher than 0.8, the items' reliability was proved.

Furthermore, the null hypothesis is to test whether there is a significant impact between a pair of variables by calculating the Pearson correlation coefficient at a 5% significant level. It was found that all the null hypothesizes were rejected at 5% significant level, and hence, it can be concluded that we have not enough evidence to say that there is no significant impact between attitude and entrepreneurial intension, behavioural control and entrepreneurial intension, educational support and attitudes, structural support and attitudes, relational support and attitudes, educational support and behavioural control, structural support and behavioural control and finally, relational support and behavioural control.

Sample adequacy tests for the questions in all six variables were proved with higher KMO values more than 0.8. Therefore, it can be decided that the variables are related to each other, share a common factor and patterned relationships between questions appeared in the designed questionnaire.

Exploratory factor analysis was performed on six variables to identify the hidden factors. Two different factors were identified from each of three independent variables, two mediating variables and the dependent variables. Then, confirmatory factor analysis is performed, and it was found that RMSR is below 0.075, and it is acceptable since the RMSR value needs to be closer to 0. Then covariance analysis is performed to the identified twelve factors. Finally, the significance of the identified twelve factors is evaluated by multiple regression analysis and the model is used to make any future predictions.

5.3 Theoretical contribution

Previous research found that educational, relational and structural supports are critical factors for entrepreneurial intentions (Turker & Selcuk 2009, Lindquist et al., 2015, Turker & Selçuk, 2009).

Our study has also found that the three independent variables (Educational structure, Relational Structure, Structural Structure) are significantly associated with

entrepreneurial intention. However, six different hidden factors were identified accordingly these three variables, which were not achieved in previous studies. Hence, it may fill the gap between previous studies in future.

Moreover, the literature suggests that two variables: behavioural control and personal attitudes also have a positive association with intention towards entrepreneurship, such as in terms of risk-taking and creativity (Mumtaz et al., 2012, Ajzen, 1991). In our study, we have considered both of these variables as mediating variables. It was found that both of them positively influence the intention to choose entrepreneurship as a career. Further, four different hidden factors were identified in two mediating variables. It may lead to filling the research gap and having better managerial implications towards society.

Finally, previous studies found that IT plays a significant role in entrepreneurial intention and in our study; the digitalization concept is considered starting from designing the questionnaire and factorizing hidden factors. Therefore, we were able to find two hidden factors that belong to digitalization in the perspective of entrepreneurial intentions.

In summary, all the findings of our study confirm the previous studies, and the new findings may fill the identified research gap of the field of entrepreneurship.

5.4 Managerial Implications

Universities are the high-level educational institutes where students can pursue their degrees as well as can do research on their interests. Hence, the findings can be used to improve the curriculum of degree programs related to entrepreneurship and further, activities can be organized to develop students' skills. It may lead to direct to have creative innovations and courage to take risks in doing new things. Furthermore, the intention of entrepreneurship is an outstanding feature where it acts as the basic theories to obtain a job. Hence, understanding the related factors belongs to entrepreneurial intension may be helpful to both individuals as well as social organizations.

Further, identifying related factors that belong to digitalization may be a great development in entrepreneurship. Entrepreneurs can develop their knowledge and skills on using the latest technology, and hence the work may be efficient by using devices such as smartphones, tabs and multimedia.

Moreover, the results found in this study are useful for the university lectures. They do any curriculum revises as per satisfying the requirements to be an entrepreneur. Further, lectures can organize several workshops for students to enhance their skills in a particular field of interest. Because we know as knowledge distributing institutes, universities are also responsible for convincing students to have their own jobs or create jobs that align with their potential skills.

On the other hand, this study concluded an excellent platform statistically to realize the mediating effect of behavioural control and personal attitudes on entrepreneurial intentions. It implies that there is a significant effect on personal behavioural control and personal attitudes of individuals lead to their own job or creating a job as per individuals' capability.

In further, analysis twelve hidden factors were identified which are affecting the entrepreneurial intension whereas abilities and skills through education, IT facilities through education, Relational structure on family, IT facilities at home/workplace, Structural support given by outsiders, Structural support towards IT, Personal intension on my career, Personal attitudes on job satisfaction and status, Behavioral control on personal motivation, Awareness on entrepreneurial projects, Personal intension to be an entrepreneur and finally Personal commitments to be an entrepreneur. It implies that most IT-related skills can adopt the newest technologies and those found useful in being an entrepreneur. Hence, the importance of digitalization can be identified and utilized in the field of entrepreneurship.

5.5 Limitations of the study

The data has been collected from a single university where it is not representing vocational skills. Therefore, the results obtained from this study would be more accurate if the sample represented vocational universities as well. Further, I collected

data through a Google form, and it may be unfair to people who are not familiar with a Google form and hence, we cannot assure the collected data at all.

5.6 Suggestions for Future Results

Future researchers should pay attention to particular types of digitalization techniques, such as functioning from a business perspective and the type of service taken through these techniques. Only the mediating variables were considered in this study. Hence, future research can be done with moderate variables. Furthermore, there may be more mediating variables that indirectly affect the entrepreneurial intention.

On the other hand, the study can be extended by considering the factors that belong to a person who is already an entrepreneur. Hence, the variables can be selected such as entrepreneurs' well-being, entrepreneurs' happiness, sustainability of the business, the environmental performance of the business, etc. As we identified the limitation, the study can be expanded by considering vocational universities as well.

REFERENCES

Aldrich, Howard & Jennings, Jennifer. (2003). The Pervasive Effects of Family on Entrepreneurship: Toward A Family Embeddedness Perspective. *Journal of Business Venturing*. 18. 573-596. 10.1016/S0883-9026(03)00011-9.

Altinay, L., Madanoglu, M., Daniele, & R. Lashley, C. 2012. The influence of family tradition and psychological traits on entrepreneurial intention, *International Journal of Hospitality Management*, 31, (2): 489-499.

Ajzen I. The theory of planned behavior. Organizational behavior and human decision processes 1991; 50(2):179– 211.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-147.

Brynjolfsson, E. and McAfee, A., 2014. *The second machine age: Work, progress, and prosperity in a time of brilliant technologies*. WW Norton & Company.

Denanyoh, R., Adjei, K., & Nyemekye, G.E. 2015.Factors That Impact on Entrepreneurial Intention of Tertiary Students in Ghana*, International Journal of Business and Social Research*, 5 (3): 19-29.

Elia, G., Margherita, A., Petti, C., 2016. An operational model to develop technology entrepreneurship EGO-system. Int. J. Innov. Technol. Manag. 13 (5), 1640008.

Fayolle, A., Gailly, B. and Lassas-Clerc, N., 2006. Assessing the impact of entrepreneurship education programmes: a new methodology. *Journal of European industrial training*.

Fiet, J. O. (2000). The pedagogical side of entrepreneurship theory. Journal of Business Venturing 16: 101-117. Fillion, L. J. (1994). Ten steps to entrepreneurial teaching. *Journal of Small Business and Entrepreneurship,* 11(3), 68-78.

Francisco, L., Francisco, M. and Juan, S., 2015. Influence of age in the adoption of new mobile payment systems. Review of Business Management, 17(58), pp.1390-1407.

Guerrero, M., Rialp, J. and Urbano, D., 2008. The impact of desirability and feasibility on entrepreneurial intentions: A structural equation model. *International Entrepreneurship and Management Journal*, *4*(1), pp.35-50.

Henderson, R. and Robertson, M., 2000. Who wants to be an entrepreneur? Young adult attitudes to entrepreneurship as a career. *Career development international*, *5*(6), pp.279-287.

Hoyer, W. & MacInnis, D., 2004. Consumer behavior (3rd ed.). Boston, MA: Houghton Mifflin

Isiwu, Prisca & Onwuka, Ifeanyi. (2017). Psychological Factors that Influences Entrepreneurial Intention Among Women in Nigeria: A Study Based in South East Nigeria. *The Journal of Entrepreneurship.* 26. 097135571770884. 10.1177/0971355717708846.

Karimi, S., Biemans, H. J. A., Lans, T., Mulder, M. & Chizari, M., 2014. The Impact of Entrepreneurship Education: A Study of Iranian Students' Entrepreneurial Intentions and Opportunity Identification. *Journal of Small Business Management.*

Karimi, S., Biemans, H.J.A., Lans, T., Chizari, M., Mulder, M. & Mahdei, K.N. 2013. Understanding role models and gender influences on entrepreneurial intentions among college students, Procedia - Social and Behavioral Sciences, 93: 204-214

King, J., 2018. Here's What Leads Baby Boomers To Try P2P Payments. [online] eMarketer. Available at: <https://www.emarketer.com/content/if-a-bank-s-involved-older-consumers-will-try-p2p-payments> [Accessed 5 October 2020].

Krueger Jr NF, Reilly MD & Carsrud AL. Competing models of entrepreneurial intentions. Journal of business venturing 2000; 15(5):411–432.

Lindquist, M.J., Sol, J. and Van Praag, M., 2015. Why do entrepreneurial parents have entrepreneurial children?. *Journal of Labor Economics*, *33*(2), pp.269-296.

Lussier, Robert & Pfeifer, Sanja. (2001). A Cross-National Prediction Model for Business Success. *Journal of Small Business Management*. 39. 228 - 239. 10.1111/0447-2778.00021.

Maes, J., Leroy, H., & Sels, L. 2014. Gender differences in entrepreneurial intentions: A TPB multi-group analysis at factor and indicator level. *European Management Journal* 32 (5), 784-794.

Mumtaz, B.A.K, Munirah, S., & Halimahton, K. 2012.The Relationship between educational support and entrepreneurial intentions in Malaysian Higher Learning Institution, Procedia - Social and Behavioral Sciences,69, 24: 2164-2173.

Powell, GN, Eddleston, KA (2013) Linking family-to-business enrichment and support to entrepreneurial success: Do female and male entrepreneurs experience different outcomes? *Journal of Business Venturing* 28(2): 261–280.

Souitaris, V., Zerbinati, S., & Al-Laham, A. 2007. Do Entrepreneurship Programmes Raise Entrepreneurial Intention Of Science And Engineering Students? The Effect of Learning, Inspiration and Resources. *Journal of Business Venturing*, 22, 566–591.

Turker, D. and Selcuk, S.S., 2009. Which factors affect entrepreneurial intention of university students?. *Journal of European industrial training*.

Weerakoon, WMPGC, & Gunatissa, HHAJ. (2014). Antecedents of entrepreneurial intention. International Journal of Scientific and Research Publications, 4(11).

Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship Theory & Practice,* 31(3), 387-401.

Wood, R. E., Bandura, A., & Bailey, T. (1990). Mechanisms governing organizational performance in complex decision-making environments. *Organizational Behavior and Human Decision Processes,* 46, 181-201.

Youssef, A.B., Boubaker, S., Dedaj, B. and Carabregu-Vokshi, M., 2020. Digitalization of the economy and entrepreneurship intention. *Technological Forecasting and Social Change*, p.120043.

Zapkau, F.B., Schwens, C., Steinmetz, H., & Kabst, R. 2015. Disentangling the effect of prior entrepreneurial exposure on entrepreneurial intention, *Journal of Business Research*,68,(3): 639-653.